

In The Claims:

1. (previously presented) A pressure sensitive adhesive comprising a copolymer which comprises: (a) a major amount of at least one acrylate or methacrylate ester; (b) from about 8% to about 30% by weight of at least one nitrogen containing monomer; (c) from about 0.5% to about 15% by weight of at least one unsaturated carboxylic acid; and (d) at least one cross linkable monomer.
2. (original) The adhesive of claim 1 wherein the adhesive has a glass transition temperature of less than about 10 degrees C.
3. (original) The adhesive of claim 1 wherein (a) is present in an amount from about 55% to about 90% by weight.
4. (previously presented) The adhesive of claim 1 wherein (a) is an acrylate or methacrylate ester which contains from about one to about 24 carbon atoms in the ester group.
5. (original) The adhesive of claim 1 wherein (a) is selected from 2-ethyl, hexyl acrylate, isooctyl acrylate, butyl acrylate, sec-butyl acrylate, methyl butyl acrylate, 4-methyl-2-pentyl acrylate, isodecyl methacrylate, their hydroxy substituted analogs, and mixtures thereof.
6. (original) The adhesive of claim 1 wherein (b) is selected from N-vinyl pyrrolidone, N-vinyl caprolactam, 1-vinyl-2-piperidone, 1-vinyl-5-methyl-2-pyrrolidone, and mixtures thereof.
7. (original) The adhesive of claim 1 wherein (b) is N-vinyl pyrrolidone.
8. (previously presented) The adhesive of claim 1 wherein (c) comprises one or more acids selected from acrylic acids, methacrylic acids, fumaric acid, maleic acid or anhydride, allyl acid, and mixtures of two or more thereof.
9. (previously presented) The adhesive of claim 1 wherein (c) is present in an amount from about 2% to about 12%.
10. (original) The adhesive of claim 1 wherein (d) is a glycidyl monomer.

11. (previously presented) The adhesive of claim 10 wherein (d) the crosslinkable monomer is selected from one or more glycidyl allyl esters, one or more epoxy acrylate esters or one or more methacrylate esters.

12. (original) The adhesive of claim 10 wherein (d) is present in an amount from about 0.05% to about 2%.

13. (previously presented) The adhesive of claim 1 further comprising (e) at least one alkyl acrylate or at least one methacrylate ester, wherein the at least one alkyl acrylate or the at least one methacrylate ester contain less than 4 carbon atoms in the alkyl group.

14. (previously presented) The adhesive of claim 13 wherein (e) comprises one or more acrylates selected from methyl acrylate, ethyl acrylate, methyl methacrylate, and ethyl methacrylate.

15. (original) The adhesive of claim 1 further comprising (f) at least one co-polymerizable monomer.

16. (previously presented) The adhesive of claim 15 wherein (f) the co-polymer monomer comprises one or more co-polymerizable monomers selected from polystyryl ethyl methacrylate, acetoacetoxyl ethyl methacrylate, alpha olefins, and vinyl esters of alkanolic acids containing more than three carbon atoms.

17. (original) The adhesive of claim 1 further comprising at least one plasticizer.

18. (previously presented) The adhesive of claim 17 wherein the plasticizer is selected from an adipate, a phosphate, a benzoate, a phthalate esters, a polyalkylene oxide, a sulfonamide, and mixtures of two or more thereof.

19. (original) The adhesive of claim 1 further comprising a tackifier.

20. (original) The adhesive of claim 1 further comprising at least one cross linking agent.

21. (original) The adhesive of claim 20 wherein the crosslinking agent is aluminum acetylacetonate or a polyamine.

22. (previously presented) A pressure sensitive adhesive comprising a blend of: (1) the pressure sensitive adhesive of claim 1 and (2) a second pressure sensitive adhesive comprising: (a) a major amount of at least one acrylate or methacrylate ester; (b) from about 0.5% to about 10% by weight of at least one nitrogen containing monomer; (c) from about 0.5% to about 15% by weight of an unsaturated carboxylic acid; and (d) at least one cross linkable monomer.

23. (original) The adhesive of claim 22 further comprising a cross linking agent.

24. (original) The adhesive of claim 23 wherein the crosslinking agent is aluminum acetylacetonate or a polyamine.

25. (previously presented) A pressure sensitive adhesive comprising a blend of: (1) a pressure sensitive adhesive comprising: (a) a major amount of at least one acrylate or methacrylate ester; (b) from about 8% to about 30% by weight of at least one nitrogen containing monomer; and (c) at least one unsaturated carboxylic acid, and (2) a second pressure sensitive adhesive comprising: (a) a major amount of at least one acrylate or methacrylate ester; (b) from about 0.5% to about 10% by weight of at least one nitrogen containing monomer; (c) at least one unsaturated carboxylic acid; and (d) at least one crosslinkable monomer.

26. (original) The adhesive of claim 25 wherein (a) of (1) and (2) is independently an acrylate or methacrylate ester containing from about one to about 24 carbon atoms in the alkyl group.

27. (original) The adhesive of claim 25 wherein (a) of (1) and (2) is independently selected from 2-ethyl hexyl acrylate, isooctyl acrylate, butyl acrylate, sec-butyl acrylate, methyl butyl acrylate, 4-methyl-2-pentyl acrylate, isodecyl methacrylate, their hydroxy substituted analogs, and mixtures thereof.

28. (original) The adhesive of claim 25 wherein (b) of (1) and (2) is independently selected from N-vinyl pyrrolidone, N-vinyl caprolactam, 1-vinyl-2-piperidone, 1-vinyl-5-methyl-2-pyrrolidone, and mixtures thereof.

29. (original) The adhesive of claim 25 wherein (b) of (1) and (2) is independently N-vinyl pyrrolidone.

30. (previously presented) The adhesive of claim 25 wherein (c) of (1) and (2) each comprise at least one acid independently acrylic acids, methacrylic acids, fumaric acid, maleic acid or anhydride, allyl acids, and mixtures of two or more thereof.

31. (original) The adhesive of claim 25 wherein (c) of (1) and (2) independently is present in an amount from about 0.5% to about 15%.

32. (original) The adhesive of claim 25 wherein (1) further comprises (d) at least one cross linkable monomer, or mixtures of two or more thereof.

33. (previously presented) The adhesive of claim 32 wherein (d) is at least one glycidyl monomer.

34. (original) The adhesive of claim 32 wherein (d) comprises epoxy acrylate or methacrylate esters or glycidyl allyl esters.

35. (original) The adhesive of claim 32 wherein (d) is present in an amount from about 0.05% to 2%.

36. (previously presented) The adhesive of claim 25 wherein (2) further comprises (e) at least one alkyl acrylate and methacrylate adhesive ester containing less than 4 carbon atoms.

37. (previously presented) The adhesive of claim 36 wherein (d) is at least one glycidyl monomer.

38. (previously presented) The adhesive of claim 25 wherein (d) the at least one cross linkable monomer is selected from epoxy acrylate or methacrylate esters and glycidyl allyl esters.

39. (previously presented) The adhesive of claim 25 wherein (d) is present in an amount from about 0.05% to 2%.

40. (original) The adhesive of claim 25 wherein (1) and (2) independently further comprise (e) at least one alkyl acrylate and methacrylate ester containing less than 4 carbon atoms in the alkyl group, (f) at least one co-polymerizable monomer, or mixtures of two or more thereof.

41. (previously presented) The adhesive of claim 40 wherein (e) the at least one alkyl acrylate is methyl acrylate, ethyl acrylate, methyl methacrylate, or ethyl methacrylate.

42. (previously presented) The adhesive of claim 41 wherein (f) comprises one or more co-polymerizable monomers selected from polystyryl ethyl methacrylate, acetoacetoxy ethyl methacrylate, alpha olefins, and vinyl esters of alkanolic acids containing more than three carbon atoms.

43. (original) The adhesive of claim 25 further comprising a tackifier, plasticizer, or mixtures thereof.

44. (original) The adhesive of claim 43 wherein the plasticizer is selected from an adipate, a phosphate, a benzoate, a phthalate esters, a polyalkylene oxide, a sulfonamide, and mixtures of two or more thereof.

45. (original) The adhesive of claim 25 further comprising a cross linking agent.

46. (original) The adhesive of claim 45 wherein the crosslinking agent is aluminum acetylacetonate or a polyamine.

47-57. (cancelled)

58. (previously presented) The adhesive of claim 1 wherein (b) is present in an amount from about 12% to about 30%.

59. (previously presented) The adhesive of claim 22 wherein (1)(b) is present in an amount from about 12% to about 30%.

60. (previously presented) The adhesive of claim 25 wherein (1)(b) is present in an amount from about 12% to about 30%.